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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/619,643 07/19/00 FISHER

D 38-21(51230)

EXAMINER

HM22/0906

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PATENT DEPARTMENT E2NA
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ART UNIT	PAPER NUMBER
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GOLDBERG, J

1655
DATE MAILED:

09/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/619,643

Applicant(s)

FISHER ET AL.

Examiner

Jeanine A Enewold Goldberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other _____

DETAILED ACTION

1. This action is in response to the papers filed August 15, 2001. Currently, claim 1 is pending. All arguments have been thoroughly reviewed but are deemed non-persuasive for the reasons which follow. This action is made FINAL.
2. Any objections and rejections not reiterated below are hereby withdrawn.

Maintained Rejections

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific asserted utility or a well established utility.

Definitions: [from REVISED INTERIM UTILITY GUIDELINES TRAINING MATERIALS; repeated from <http://www.uspto.gov/web/menu/utility.pdf>]

"Credible Utility" - Where an applicant has specifically asserted that an invention has a particular utility, that assertion cannot simply be dismissed by Office personnel as being "wrong". Rather, Office personnel must determine if the assertion of utility is credible (i.e., whether the assertion of utility is believable to a person of ordinary skill in the art based on the totality of evidence and reasoning provided). An assertion is credible unless (A) the logic underlying the assertion is seriously flawed, or (B) the facts upon which the assertion is based is inconsistent with the logic underlying the assertion. Credibility as used in this context refers to the reliability of the statement based on the logic and facts that are offered by the applicant to support the assertion of utility. A *credible* utility is assessed from the standpoint of whether a person of ordinary skill in the art would accept that the recited or disclosed invention is currently available for such use. For example, no perpetual motion machines would be considered to be

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currently available. However, nucleic acids could be used as probes, chromosome markers, or forensic or diagnostic markers. Therefore, the credibility of such an assertion would not be questioned, although such a use might fail the *specific* and *substantial* tests (see below).

"Specific Utility" - A utility that is *specific* to the subject matter claimed. This contrasts with a *general* utility that would be applicable to the broad class of the invention. For example, a claim to a polynucleotide whose use is disclosed simply as a "gene probe" or "chromosome marker" would not be considered to be *specific* in the absence of a disclosure of a specific DNA target. Similarly, a general statement of diagnostic utility, such as diagnosing an unspecified disease, would ordinarily be insufficient absent a disclosure of what condition can be diagnosed.

"Substantial utility" - a utility that defines a "real world" use. Utilities that require or constitute carrying out further research to identify or reasonably confirm a "real world" context of use are not substantial utilities. For example, both a therapeutic method of treating a known or newly discovered disease and an assay method for identifying compounds that themselves have a "substantial utility" define a "real world" context of use. An assay that measures the presence of a material which has a stated correlation to a predisposition to the onset of a particular disease condition would also define a "real world" context of use in identifying potential candidates for preventive measures or further monitoring.

On the other hand, the following are examples of situations that require or constitute carrying out further research to identify or reasonably confirm a "real world" context of use and, therefore, do not define "substantial utilities":

A. Basic research such as studying the properties of the claimed product itself or the mechanisms in which the material is involved.

B. A method of treating an unspecified disease or condition. (Note, this is in contrast to the general rule that treatments of specific diseases or conditions meet the criteria of 35 U.S.C. 101.)

C. A Method of assaying for or identifying a material that itself has no "specific and/or substantial utility".

D. A method of making a material that itself has no specific, substantial, and credible utility.

E. A claim to an intermediate product for use in making a final product that has no specific, substantial, and credible utility.

Note that "throw away" utilities do not meet the tests for a *specific* or *substantial* utility. For example, using transgenic mice as snake food is a utility that is neither specific (all mice could function as snake food) nor substantial (using a mouse costing tens of thousands of dollars to produce as snake food is not a "real world" context of use). Similarly, use of any protein as an animal food

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supplement or a shampoo ingredient are "throw away" utilities that would not pass muster as specific or substantial utilities under 35 U.S.C. ' 101. This analysis should, of course, be tempered by consideration of the context and nature of the invention. For example, if a transgenic mouse was generated with the specific provision of an enhanced nutrient profile, and disclosed for use as an animal food, then the test for specific and substantial *asserted* utility would be considered to be met.

"Well established utility" - a specific, substantial, and credible utility which is well known, immediately apparent, or implied by the specification's disclosure of the properties of a material, alone or taken with the knowledge of one skilled in the art. "Well established utility" does not encompass any "throw away" utility that one can dream up for an invention or a nonspecific utility that would apply to virtually every member of a general class of materials, such as proteins or DNA. If this is the case, any product or apparatus, including perpetual motion machines, would have a "well established utility" as landfill, an amusement device, a toy, or a paper weight; any carbon containing molecule would have a "well established utility" as a fuel since it can be burned; any protein would have well established utility as a protein supplement for animal food. This is not the intention of the statute.

The claimed nucleic acid compounds are not supported by a specific asserted utility because the disclosed uses of the nucleic acids are not specific and are generally applicable to any nucleic acid. The specification teaches that the nucleic acids may be used to produce a plant containing reduced levels of a protein (pg. 11), determining an association between a polymorphisms and a plant trait (pg. 11), isolating a genetic region or nucleic acid (pg. 11), determining a level or pattern in a plant cell of a protein in a plant (pg. 11), determining a mutation in a plant whose presence is predictive of a mutation affecting a level or pattern of a protein (pg. 13), as molecular tags to isolate genetic regions, isolate genes, map genes, and determine gene function (pg. 14), identifying tissues (pg. 14), The specification states that the nucleic acid ESTs of the present invention can enable the acquisition of molecular markers, which can be used in breeding schemes, genetic and molecular mapping and cloning of agronomically

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significant genes (pg. 31). These are non-specific uses that are applicable to nucleic acids in general and not particular or specific to the nucleic acids being claimed.

Further, the claimed nucleic acid compounds are not supported by a substantial utility because no substantial utility has been established for the claimed subject matter. For example, a nucleic acid may be utilized to obtain a protein. The protein could then be used in conducting research to functionally characterize the protein. The need for such research clearly indicates that the protein and/or its function is not disclosed as to a currently available or substantial utility. A starting material that can only be used to produce a final product does not have substantial asserted utility in those instances where the final product is not supported by a specific and substantial utility. In this case none of the proteins that are to be produced as final products resulting from processes involving claimed nucleic acid have asserted or identified specific and substantial utilities. The research contemplated by applicant(s) to characterize potential protein products, especially their biological activities, does not constitute a specific and substantial utility. Identifying and studying the properties of a protein itself or the mechanisms in which the protein is involved does not define a "real world" context or use. Similarly, the other listed and asserted utilities as summarized above or in the instant specification are neither substantial nor specific due to being generic in nature and applicable to a myriad of such compounds. Note, because the claimed invention is not supported by a specific and substantial asserted utility for the reasons set forth above, credibility has not been assessed. Neither the specification as filed nor any art

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of record discloses or suggests any property or activity for the nucleic acid compounds such that another non-asserted utility would be well established for the compounds.

Response to Arguments

The response traverses the rejection. The response asserts additional utilities including determining the presence and/or identity of polymorphisms, measuring the levels of an mRNA in a sample, determining location of a corresponding DNA sequences...etc (pg 30 of the specification). This argument has been reviewed but is not convincing because all of these additional asserted utilities fail to meet the utility guidelines in so much as they are not specific or substantial. As stated above, a "Specific Utility" is a utility that is *specific* to the subject matter claimed. A general statement of diagnostic utility, such as diagnosing an unspecified disease, would ordinarily be insufficient absent a disclosure of what condition can be diagnosed. Moreover, "Substantial utility" is a utility that defines a "real world" use. Utilities that require or constitute carrying out further research to identify or reasonably confirm a "real world" context of use are not substantial utilities. Thus, these additional utilities also do not meet the guidelines.

The response also argues, "many of these uses are directly analogous to a microscope". This argument has been reviewed but is not convincing because the microscope provides information to the scientist which is automatically useful. For example, the microscope may be used for identification and differentiation between gram-positive and gram-negative bacteria. The differentiation of bacteria facilitates in the administration of proper antibiotics. For example, if the microscope is used to

determine whether Staph is present or whether Strep is present provides valuable information to the scientist and/or doctor for treating patients. The instant invention, however, provides no information to this extent. If the scientist determines that SEQ ID NO: 1 is present, the scientist does not know how to use this information. Thus, the identification of SEQ ID NO: 1 is does not have a substantial utility.

The response argues the asserted utilities are not insufficient because other molecules can be used for the same purpose. This argument has been reviewed but is not convincing because the guidelines specifically states that "Specific Utility" - A utility that is *specific* to the subject matter claimed. This contrasts with a *general* utility that would be applicable to the broad class of the invention. With regard to applicants arguments directed to new golf clubs which are used for the same purpose such as hitting golf balls, in that particular example, the new golf clubs would be specific to the intended use of hitting golf balls. The instant nucleic acids are more closely related to the idea that not every piece of sports equipment would be applicable to this use, i.e. golf gloves. The guidelines do not prohibit multiple products with the same utility, i.e. exclusive utility. The guidelines are directed to knowing how to use the instant nucleic acids in a specific manner. For example, a large group of nucleic acids provide information with respect to predisposition to diabetes. This is considered to be specific and substantial utility. The nucleic acid is not required to be the only nucleic acid which has a certain utility. However, in the instant case the claims are drawn to nucleic acids which have the assertion of being applicable to things in which every nucleic acid is applicable such as molecular tags to isolate genetic regions. With respect to applicants

arguments that the claimed nucleic acid molecules will identify a unique subset of related sequences, the guidelines specifically state, "A method of assaying for or identifying a material that itself has no "specific and/or substantial utility" does not have specific and substantial utility. Since the unique subset of related sequences has no utility, this provides no support for utility.

Thus, in summary, the instant EST nucleic acids do not have a substantial or specific utility. Each of the provided utilities is general, as provided in the Utility Guidelines.

Thus for the reasons above and those already of record, the rejection is maintained.

Claim Rejections - 35 USC § 112- Enablement

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 1 is also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific, substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Response to Arguments

The response traverses the rejection. The response asserts that the rejection under utility has been overcome by the foregoing arguments. This argument has been reviewed but is not convincing because the arguments provided above were not

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persuasive. Thus for the reasons above and those already of record, the rejection is maintained.

Claim Rejections - 35 USC § 112-Description

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are drawn to a nucleic acid molecule that encodes a maize protein or fragment thereof comprising a nucleic acid sequence selected from SEQ ID NO: 1-5.

The specification teaches the nucleic acid of SEQ ID NO: 1-5.

There is not adequate description of the genus of nucleic acids comprising SEQ ID NO: 1-5. The specification only discloses nucleic acids of SEQ ID NO: 1-5. The claim is drawn to a genus which includes any nucleic acid which minimally contains SEQ ID NO: 1-5. The claim encompasses genes, full open reading frames, fusion constructs, and cDNAs. There is substantial variability among the species of DNAs encompassed within the scope of the claims because SEQ ID NO: 1-5 is only a fragment of any full-length gene or cDNA species. The nucleic acids described are not representative of the genus nucleic acids comprising SEQ ID NO: 1-5. Furthermore,

one of skill in the art would conclude that applicant was not in possession of the claimed "nucleic acids comprising SEQ ID NO: 1-5" because the description of only five members of this genus is not representative of the nucleic acids of the genus and is insufficient to support the claims. Weighing all factors,

- 1) partial structure of the DNAs that comprise SEQ ID NO: 1-5;
- 2) the breadth of the claim as reading on genes yet to be discovered in addition to numerous fusion constructs and cDNAs
- 3) the lack of correlation between the structure and the function of the genes and/or fusion constructs; in view of the level of knowledge and skill in the art, one skilled in the art would not recognized from the disclosure that the applicant was in possession of the genus of DNAs which comprise SEQ ID NO: 1-5. Thus, the specification does not adequately provide a written description for nucleic acids comprising SEQ ID NO: 1-5.

Response to Arguments

The response traverses the rejection. The response asserts that applicants need not "describe," all things that are encompassed by the claims. This argument has been reviewed but is not convincing for the reasons specifically set out in the Written Description guidelines, Example 7, directed to ESTs. The Written Description guidelines, specifically provide that a description of a genus of cDNAs may be achieved by means of a representative number of cDNAs defined by nucleotide sequence, falling within the scope of the genus or of a recitation of structural features common to the members of the genus, which features constitute a substantial portion of the genus.

Applicants have provided one member of the genus of nucleic acids comprising SEQ ID NO: 1, namely SEQ ID NO: 1. This is not considered to be a substantial portion of the genus. The genus includes genes yet to be discovered which have not been described. It is noted *Vas-Cath Inc. V. Mahurkar*, 19 USPQ2b 1111, clearly states that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the 'written description' inquiry, whatever is now claimed". Applicant is reminded that *Vas-Cath* makes clear that the written description provision of 35 USC 112 is severable from its enablement provision. In *The Regents of the University of California v. Eli Lilly* (43 USPQ2b 1398-1412), the court held that a generic statement which defines a genus of nucleic acids by only their functional activity does not provide an adequate written description of the genus. The court indicated that while Applicants are not required to disclose every species encompassed by a genus, the description of a genus is achieved by the recitation of a representative number of DNA molecules, usually defined by a nucleotide sequence, falling within the scope of the claimed genus. At section B(1), the court states that "An adequate written description of a DNA...' required a precise definition, such as by structure, formula, chemical name, or physical properties', not a mere wish or plan for obtaining the claimed chemical invention". In analyzing whether the written description requirement is met for a genus claim, it is first determined whether a representative number of species have been described by their complete structure. In the instant case, Applicant has defined only a fragment of a nucleic acid sequence. Applicant has not disclosed any genomic DNA sequences and particularly

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has not disclosed any intron sequences or regulatory sequences. Accordingly, Applicants have not adequately disclosed the relevant identifying characteristics of a representative number of species within the claimed genus.

Thus for the reasons above and those already of record, the rejection is maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Walbot (Genbank Accession Number AI978199, August 1999).

Walbot teaches a nucleic acid from Zea mays which is considered to be identical to the instantly claimed nucleic acid. It is noted that the nucleic acid of Walbot was isolated from Zea mays cultivar W23. The instantly claimed nucleic acid was also isolated from Zea mays. However, the specification does not provide any additional information regarding the specific cultivar of Zea mays. While the nucleic acid of Walbot differs from instant SEQ ID NO: 5 at a single position (i.e., nucleotide position 63), this nucleotide difference is within a region of high GC content such that the mismatch may be due to a sequencing error. The nucleotide sequence is an inherent property of the

nucleic acid and is only one means by which a nucleic acid may be characterized. Thus, if an error in sequencing has occurred, the nucleic acids of the instant application and Walbot are inherently the same. Absent secondary considerations, the nucleic acid of Walbot appears to be the same nucleic acid of SEQ ID NO: 5.

Response to Arguments

The response traverses the rejection. The response asserts that neither reference anticipates the claims because a prior art reference to anticipate the claims must teach every element of the claimed invention. Applicants argue that "to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference". Finally, Applicants also argue that inherency may not be established by probabilities or possibilities, The mere fact that a certain thing may result from a given set of circumstances (e.g. sequencing errors) is not sufficient."

These arguments have been reviewed and found non-persuasive because applicants have provided no information with respect to the origin of their nucleic acid such that determination may be provided that the nucleic acids are not the same. Applicants have not made any attempt to differentiate their nucleic acid from the ones taught in the art. "All extrinsic evidence" does in fact suggest that the nucleic acid taught in the prior art is identical to the claimed nucleic acid because the nucleic acids were isolated from the same source. Applicant tries to argue that the "inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances (sequencing errors) is not sufficient". The

argument that inherency may not be established by probabilities or possibilities is not immediately applicable to the instant rejection. The rejection is based on the possession of a nucleic acid from the same organism with the same general sequence. The evidence in the case tends to illustrate that isolation of the same nucleic acid from the same organism is inherently the same. Applicants have not provided any additional evidence to substantiate the argument that the nucleic acids are not identical. In the event that the organisms were from different strains, it would fall into the category of probabilities or possibilities.

Thus for the reasons above and those already of record, the rejection is maintained.

7. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Walbot (Genbank Accession Number AI734448, February 2000).

Walbot teaches a nucleic acid from Zea mays which is considered to be identical to the instantly claimed nucleic acid. It is noted that the nucleic acid of Walbot was isolated from Zea mays cultivar Ohio43. The instantly claimed nucleic acid was also isolated from Zea mays. However, the specification does not provide any additional information regarding the specific cultivar of Zea mays. While the nucleic acid of Walbot differs from instant SEQ ID NO: 5 at two positions (i.e., nucleotide position 35 and 63). The nucleotide difference at position 63 is within a region of high GC content such that the mismatch may be due to a sequencing error. The nucleotide sequence is an inherent property of the nucleic acid and is only one means by which a nucleic acid may

be characterized. Thus, if an error in sequencing has occurred, the nucleic acids of the instant application and Walbot are inherently the same. Absent secondary considerations, the nucleic acid of Walbot appears to be the same nucleic acid of SEQ ID NO: 5.

Response to Arguments

The response traverses the rejection. The response asserts that neither reference anticipates the claims because a prior art reference to anticipate the claims must teach every element of the claimed invention. Applicants argue that "to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference". Finally, Applicants also argue that inherency may not be established by probabilities or possibilities, The mere fact that a certain thing may result from a given set of circumstances (e.g. sequencing errors) is not sufficient."

These arguments have been reviewed and found non-persuasive because applicants have provided no information with respect to the origin of their nucleic acid such that determination may be provided that the nucleic acids are not the same. Applicants have not made any attempt to differentiate their nucleic acid from the ones taught in the art. "All extrinsic evidence" does in fact suggest that the nucleic acid taught in the prior art is identical to the claimed nucleic acid because the nucleic acids were isolated from the same source. Applicant tries to argue that the "inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances (sequencing errors) is not sufficient". The

argument that inherency may not be established by probabilities or possibilities is not immediately applicable to the instant rejection. The rejection is based on the possession of a nucleic acid from the same organism with the same general sequence. The evidence in the case tends to illustrate that isolation of the same nucleic acid from the same organism is inherently the same. Applicants have not provided any additional evidence to substantiate the argument that the nucleic acids are not identical. In the event that the organisms were from different strains, it would fall into the category of probabilities or possibilities.

Thus for the reasons above and those already of record, the rejection is maintained.

Conclusion

8. No claims allowable over the art.

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jeanine Enewold Goldberg whose telephone number is (703) 306-5817. The examiner can normally be reached Monday-Thursday from 7:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax number for this Group is (703) 305- 3014.

Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Jeanine Enewold Goldberg
August 28, 2001



W. Gary Jones
Supervisory Patent Examiner
Technology Center 1600

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